

## Appendix C: Pertinent Correspondence

This appendix contains the following correspondence pertinent to this Environmental Impact Statement and its preparation, listed in chronological order.

Date	From	To	Regarding
23 Mar 1999	Greg Mladenka UDWR	Ken Adair UDOT	Stream Alteration Permit
15 Apr 1999	Reed Harris USFWS	Michael Richie FHWA	Threatened and endangered species
25 May 1999	Leigh Kuwanwisiwma Hopi Tribe	Keith Montgomery Montgomery Archaeological Consultants	Consultation with Hopi Tribe
28 May 1999	Martha Hayden Utah Geological Survey	Jackie Montgomery Montgomery Archaeological Consultants	Paleontological localities
6 Oct 2000	Michael Schwinn COE	Lorraine Richards Entranco	Waters of U.S. identification
8 Nov 2001	Larry Bulloch City of St. George	Vance Hanson HDR Engineering	Airport access road
12 Dec 2001	Grady McNure COE	Vince Izzo HDR Engineering	Addendum to waters of U.S. identification and permitting
11 Jan 2002	James Crisp BLM	Robert Dowell HDR Engineering	Section 4(f) screening for impacts
24 Jan 2002	Larry Bulloch City of St. George	Robert Dowell HDR Engineering	Comments on suggested alternative alignment
26 Sep 2002	Henry R. Maddux USFWS	Greg Punske FHWA	Biological Opinion
27 Jan 2003	Susan Miller UDOT	James Kirkland Utah Geological Survey	Paleontological Resources



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WATER RIGHTS

Michael O. Leavitt  
Governor  
Kathleen Clarke  
Executive Director  
Robert L. Morgan  
State Engineer

1594 West North Temple, Suite 220  
PO Box 146300  
Salt Lake City, Utah 84114-6300  
801-538-7240  
801-538-7467 (Fax)

March 23, 1999

Ken Adair, Project Manager  
Southern Corridor Study  
Utah Department of Transportation  
1345 South 350 East  
Richfield, UT 84701

RE: Southern Corridor Study Meeting and Comments

Dear Mr. Adair:

I will be unable to attend the Partnering Meeting on April 6, 1999; however, I have the following comments to make:

Proximity to the high and low flow channels and banks of the Virgin River and Fort Pearce Wash needs to be taken into account in planning the alignment. The roadway should not be placed where high flows or natural erosional processes will threaten the facility and/or require bank hardening to prevent such from occurring. Crossings of natural streams need to minimize impacts and effectively conduct high flows. A Stream Alteration Permit will need to be acquired from this office prior to commencing any work that affects the bed or banks of any natural stream.

If you have any questions, I can be reached at 801-538-7375.

Sincerely,

A handwritten signature in black ink, appearing to read 'Greg Mladenka'.

Greg C. Mladenka  
Stream Alteration Specialist

GCM/jm

pc: Kerry Carpenter - Regional Engineer



## United States Department of the Interior

## FISH AND WILDLIFE SERVICE

UTAH FIELD OFFICE

LINCOLN PLAZA

145 EAST 1300 SOUTH, SUITE 404

SALT LAKE CITY, UTAH 84115



In Reply Refer To

April 15, 1999

Mr. Michael G. Richie  
 Utah Division Administrator  
 Federal Highway Administration  
 2520 West 4700 South, Suite 9-A  
 Salt Lake City, UT 84118

RE: NOI for EIS - Transportation Corridor from Milepost 1 on I-15 South of St. George to SR-9 near Hurricane, Washington County, Utah (ER 99/233).

Dear Mr. Richie:

We have reviewed the subject Notice of Intent to prepare an Environmental Impact Statement and offer the following comments for your scoping process.

Threatened and Endangered Species

Potential impacts to threatened and endangered species should be assessed in your proposed EIS and consultation under section 7 of the Endangered Species Act may be required. Below is a list of threatened, endangered, and candidate species that may occur within the area of influence of your proposed action. While candidate species have no legal protection under the Endangered Species Act, we ask that you try to avoid them if they are found in the area.

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status*</u>
Bald Eagle <sup>3</sup>	<i>Haliaeetus leucocephalus</i>	T
Desert Tortoise <sup>4</sup>	<i>Gopherus agassizii</i>	T
Dwarf-Bear Poppy	<i>Arctomecon humilis</i>	E
Mexican Spotted Owl <sup>1</sup>	<i>Strix occidentalis lucida</i>	T
Peregrine Falcon <sup>1</sup>	<i>Falco peregrinus</i>	E
Siler Pincushion Cactus	<i>Pediocactus sileri</i>	T
Southwestern Willow Flycatcher <sup>1</sup>	<i>Empidonax traillii extimus</i>	E
Virgin River Chub <sup>5</sup>	<i>Gila seminuda</i>	E
Woundfin <sup>5</sup>	<i>Plagopterus argentissimus</i>	E
Holmgren Milkvetch <sup>6</sup>	<i>Astragalus holmgreniorum</i>	C
Shivwits Milkvetch <sup>6</sup>	<i>Astragalus ampullaviodes</i>	C

T = threatened

E = endangered

C = candidate

1 = Nests in this county of Utah.

2 = Migrates through Utah, no resident populations.

3 = Wintering populations (only four known nesting pairs in Utah).

4 = Critical habitat designated in this county.

5 = Critical habitat proposed in this county.

6 = Proposed Rule to List as Endangered in Preparation.

The proposed action should be reviewed and a determination made if the action would affect any listed species or their critical habitat. A determination should also be made whether or not the action is likely to jeopardize the continued existence of proposed species or result in the destruction or an adverse modification of any critical habitat proposed for such species. If the determination is "may affect" for listed species, you must request in writing formal consultation from the Field Supervisor, at the address given above. In addition, if you determine that the proposed action is likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat, you must confer with this office. At that time, you should provide this office a copy of the biological assessment and any other relevant information that assisted you in reaching your conclusion.

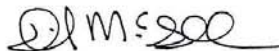
Your attention is also directed to Section 7(d) of the Endangered Species Act, as amended, which underscores the requirement that the Federal agency or the applicant shall not make any irreversible or irretrievable commitment of resources during the consultation period which, in effect, would deny the formulation or implementation of reasonable and prudent alternatives regarding their actions on any endangered or threatened species.

Other Fish and Wildlife Resources

The EIS should assess potential impacts to fish, wildlife, and habitat resources in the project area and identify appropriate measures to avoid or mitigate impacts.

We appreciate the opportunity to provide these comments for your use in your scoping process for the EIS. Should you have any questions or need anything further please contact Larry England of my staff at 524-5001 ext. 138.

Sincerely,



Reed E. Harris  
Utah Field Supervisor

cc: Terence N. Martin, U.S. Department of the Interior, Office of the Secretary, Washington, D. C.  
Regional Environmental Officer, U.S. Department of the Interior, Denver, CO  
Bureau of Land Management, St. George, UT



Wayne Taylor, Jr.  
CHAIRMAN

Phillip R. Quochoytewa, Sr.  
VICE-CHAIRMAN

May 25, 1999

Keith R. Montgomery  
Montgomery Archaeological Consultants  
Box 147  
322 East 100 South  
Moab, Utah 84532

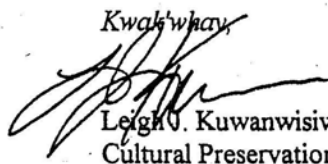
Dear Mr. Montgomery,

This letter in response to your correspondence of May 5, 1999 requesting consultation with the Hopi Tribe regarding the Southern Corridor Transportation Project. Your letter seeks comments relating to the project in accordance with the National Historic Preservation Act and the American Indian Religious Freedom Act. We wish to also provide you with comments relating to the Archeological Resources Protection Act and the Native American Graves Protection and Repatriation Act.

Hopi clans settled in and migrated from many areas of Utah, including this project area. The Hopi Tribe claims cultural affiliation in what is now Utah with pre-contact cultures and cultural areas called Paleo-Indian, Archaic, Basketmaker, Fremont and Anasazi. We wish to be consulted on your archeological survey of this project area any discoveries made during the survey.

We welcome you to meet with us in Kykotsmovi at the June meeting of our Cultural Preservation Office and Cultural Resources Advisory Task Team, which is composed of traditional religious leaders from the Hopi Villages. Please call me or Thana Leslie at (520) 734-2244 so that we may place you on the agenda for this meeting. Thank you for your interest in addressing our concerns.

*Kwak'w'ay*



Leigh O. Kuwanwisiwma, Director,  
Cultural Preservation Office



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
UTAH GEOLOGICAL SURVEY

Michael O. Leavitt  
Governor  
Kathleen Clarke  
Executive Director  
M. Lee Allison  
State Geologist

1594 West North Temple, Suite 3110  
PO Box 146100  
Salt Lake City, Utah 84114-6100  
801-537-3300  
801-537-3400 (Fax)  
<http://www.ugs.state.ut.us>

10

May 28, 1999

Jackie Montgomery  
Montgomery Archaeological Consultants  
P.O. Box 147  
Moab UT 84532

RE: St. George Southern Corridor Inventory, Washington County, Utah  
U.C.A. 63-73-19 (Paleontological) Compliance; Request for Confirmation of Literature  
Search according to the UDOT/UGS Memorandum of Understanding.

Dear Jackie:

I have conducted a paleontological file search for the St. George Southern Corridor Inventory project in response to your letter of May 25, 1999. This project qualifies for treatment under the UDOT/UGS executed Memorandum of Understanding.

There are no paleontological localities recorded in the project area. Exposures of Quaternary alluvial deposits (Qa, TQu) and basalts (Qb) have a low potential for yielding significant fossil localities, but there are also exposures of the Jurassic Navajo Sandstone, and the Triassic Moenkopi and Chinle formations, in the project area. These formation have potential for yielding significant vertebrate fossils, particularly vertebrate tracks and trackways. Unless exposures of these formations are disturbed as a result of construction activities, this project should have no effect on paleontological resources.

If you have any questions, please call me at (801) 537-3311.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Martha'.

Martha Hayden  
Paleontological Assistant





REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO  
CORPS OF ENGINEERS  
1325 J STREET  
SACRAMENTO, CALIFORNIA 95814-2922

October 6, 2000

Regulatory Branch (200050443)

RECEIVED  
OCT 12 2000  
ENTRANCO

Lorraine Richards  
Entranco  
Suite 110  
6053 South Fashion Square Drive  
Murray, Utah 84107

Dear Ms. Richards:

This is in regard to the Waters of the United States Identification, Southern Corridor Study which you submitted to this office under cover letter dated July 20, 2000.

I have reviewed the study and verified its conclusions in the field. I concur with the study's jurisdictional determinations for waters in the study corridor. I would be pleased to meet with you to discuss the project and the permitting process.

If you have any questions, please contact me at the Utah Regulatory Office, 1403 South 600 West, Suite A, Bountiful, Utah 84010, or telephone (801) 295-8380. Please refer to project number 200050443.

Sincerely,

A handwritten signature in cursive script, reading "Michael A. Schwinn", is written over the typed name.

Michael A. Schwinn  
Chief, Utah Regulatory Office

3.7.2



NOV 13 2001

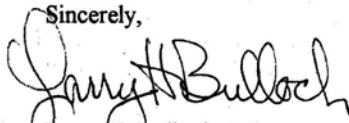
November 8, 2001

Vance Hanson  
HDR Engineering, Inc.  
3995 South 700 East, Suite 100  
Salt Lake City, UT 84107

Dear Vance:

At your request I am providing comment on the Klein Development letter dated October 16, 2001. The alignment of the Replacement Airport access road connecting to the Southern Corridor was established through the federal NEPA process over a six year period. It became a part of the public record on January 30, 2001 when the FAA issued its Record of Decision. Changing the access road alignment now would likely involve an amendment to the Environmental Assessment document. Because this would have serious legal, financial and environmental implications to the airport project it would require significant justification which to date has not been borne out.

Sincerely,

  
Larry H. Bulloch, P.E.  
Public Works Director

**CITY OF ST. GEORGE**  
175 East 200 North, St. George, Utah 84770  
(435) 634-5800  
[www.ci.st-george.ut.us](http://www.ci.st-george.ut.us)

**MAYOR**  
Daniel D. McArthur

**CITY MANAGER**  
Gary S. Esplin

**CITY COUNCIL**  
Sharon L. Isom  
Suzanne B. Allen, Larry H. Gardner,  
Robert Whatcott, James J. Eardley



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO  
CORPS OF ENGINEERS  
1325 J STREET  
SACRAMENTO, CALIFORNIA 95814-2922

4.1.2

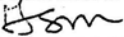
December 12, 2001

Memo to: Vince Izzo, HDR

Subject: Southern Corridor, Addendum to Waters of the U.S. Identification

Sorry for the delay. The additional "waters" identification appears to track with the previously verified effort and it appears that "waters" will be avoided and impacts minimized. In light of the previous precedent on this project, I agree with the identification effort of "waters" thus far, including your addendum. However, in the future, please follow the attached guidelines when delineating and identifying waters of the U.S.

As you know, we favor the route that has the least damaging effects on the aquatic environment. Nationwide general permit number 14 appears applicable assuming the project meets the terms and conditions. You will need to submit a more formal notification at a later date when crossing details are more developed.

  
Grady L. McNure  
Chief, St. George Regulatory Office

Attachments

3.5.4



**UNITED STATES DEPARTMENT OF THE INTERIOR**

**BUREAU OF LAND MANAGEMENT**

ST. GEORGE FIELD OFFICE

JAN 16 2002

345 E. Riverside Drive

St. George, Utah 84790

Phone (435)688-3200 • Fax (435)688-3252

January 11, 2002

In reply refer to:

1610

(UT-100)

Mr. Robert Dowell, Project Manager  
Southern Corridor Project/EIS  
Utah Department of Transportation  
1345 South 350 West  
Richfield, UT 84701-0700

RE: Section 4(f) Screening for Impacts Related to the Southern Corridor Project

Dear Mr. Dowell:

The St. George Field Office, Bureau of Land Management, is in receipt of a request from HDR Engineering, consultant for the Southern Corridor Project environmental impacts analysis, to identify any section 4(f) resources on public lands within the project area. As this office has previously identified to HDR staff during meetings held here in the St. George Field Office, the following section 4(f) resources are present within the project area and could be impacted by construction of the Southern Corridor Project, depending on the alternative selected:

**Sand Mountain Special Recreation Management Area (SRMA)-40,725 acres**  
designated by *St. George Record of Decision and Resource Management Plan* (March 1999)

**Special Features of Sand Mountain SRMA:**

- A. Fort Pearce Historic Site- significant historic site and visitor attraction
- B. Dominguez-Escalante Trail-significant historic trail and recreational use area
- C. Honeymoon and Temple Trails-significant historic trails and visitor attractions
- D. Dinosaur Trackway-significant paleontological site and visitor attraction
- E. Sand dune off-highway vehicle recreation area
- F. Multiple use recreation trails: hiking, equestrian, mountain bike, motorized vehicles

Visit our website at <http://www.ut.blm.gov> for information about current Utah BLM environmental documents

**Warner Ridge/Fort Pearce Area of Critical Environmental Concern (ACEC)-4,281 acres**  
designated by *St. George Record of Decision and Resource Management Plan* (March 1999)

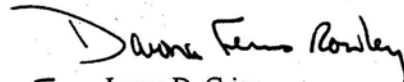
**Special Features of the ACEC:**

- A. Threatened and endangered plant species
- B. Fort Pearce-significant historic site and visitor attraction
- C. Honeymoon Trail-significant historic trail and visitor attraction
- D. Essential Wildlife Habitat and Riparian Values-water fowl, gila monster, bats, raptors
- F. Multiple use recreation trails: hiking, equestrian, mountain biking

Other historic properties, as defined by the implementing regulations for the National Historic Preservation Act, as amended (36 CFR 60.4 a-d), are present in the SRMA and ACEC. These include prehistoric and historic period archeological sites that satisfy one of more of the eligibility criteria for inclusion to the National Register of Historic Places. An assessment of any project-related effects to these resources will need to be completed and Section 106 consultation conducted with the Utah State Historic Preservation Officer for the Southern Corridor Project. Appropriate treatments to lessen any adverse effects to historic properties must be implemented prior to the authorization of rights-of-way grants on public lands.

The environmental impact statement currently being prepared by HDR Engineering will need to take into account the above-cited resources and fully disclose any project-related impacts. If you have questions or require any additional information concerning these recommendations, kindly contact Dawna Ferris-Rowley, Assistant Field Office Manager, at 688-3216. We look forward to working with you and the other parties associated with this project.

Sincerely,

  
For James D. Crisp  
Field Office Manager

cc: Vincent Izzo  
HDR Engineering

3.7.2

cc: Greg  
Yince  
Brant



January 24, 2002

Robert Dowell, P.E.  
UDOT, Region 4  
1345 South 350 West  
Richfield, UT 84701

RE: UDOT Southern Corridor Project

Dear Mr. Dowell:

The City of St. George has recently been advised of a proposal to have UDOT look at an alternative alignment in the Southern Corridor EIS. This proposal is to move the Southern Corridor I-15 interchange north closer to the Bloomington interchange, and route the roadway east to River Road and then south back to the current alignment. St. George has reviewed this proposal. It is our determination that it does not meet the purpose and need for the Southern Corridor, or the objectives of the City's General Plan or its Road Master Plan for the following reasons:

- It would not align with other proposed transportation improvements identified within the City's Road Master Plan, including the Atkinville interchange and associated road west of I-15.
- It would not be compatible with the City's General Plan. The alternative would conflict with existing and planned residential and industrial developments, whereas the current proposed Atkinville interchange alignment is undeveloped, allowing the City to plan for appropriate land use around the Southern Corridor.
- The established right-of-way along River Road is not wide enough to accommodate this type of arterial highway. It also has numerous existing accesses that would be in conflict with such a facility.
- It would be invasive to the current and future planned communities of the area to place a high speed transportation facility through or adjacent to local neighborhoods and schools.
- Is not in agreement with the Southern Corridor purpose and need. The purpose and need is to provide a regional conveyance facility for traveling between St. George and Hurricane that would be compatible with local land use plans and accommodate areas of future growth. The out-of-direction travel for the identified alternative would minimize and possibly defeat its use as a regional conveyance facility between St. George and Hurricane. Nor would the alternative support the land development proposed for the southern part of St. George.

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**CITY OF ST. GEORGE**  
175 East 200 North, St. George, Utah 84770  
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[www.ci.st-george.ut.us](http://www.ci.st-george.ut.us)

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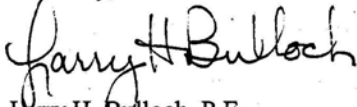
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Robert Dowell, P.E.  
January 24, 2002  
Page 2

- There are numerous constraints in the area where the new interchange is proposed which make construction of a new interchange undesirable. This includes such things as conflicts with existing homes, steep hillsides and close proximity to the Bloomington interchange.

In conclusion, the City of St. George believes this identified alternative does not meet the purpose and need of the Southern Corridor and the City's future transportation and land use goals. If you have any questions, please give me a call.

Sincerely,

A handwritten signature in black ink that reads "Larry H. Bulloch". The signature is written in a cursive style with a large, stylized "L" and "B".

Larry H. Bulloch, P.E.  
Public Works Director



## PROJECT FILE



### United States Department of the Interior FISH AND WILDLIFE SERVICE

UTAH FIELD OFFICE  
2369 WEST ORTON CIRCLE, SUITE 50  
WEST VALLEY CITY, UTAH 84119

SURNAME

England 26 Sep 02

In Reply Refer To

(FWS/6-UT-02-F-008)

September 26, 2002

Greg Punske  
Federal Highway Administration  
2520 West 4700 South  
Salt Lake City, Utah 84118

Re: Revised Biological Opinion for the Southern Corridor Highway Project in St. George and Washington Areas, Washington County, Utah

Dear Mr. Punske:

In accordance with Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), and the Interagency Cooperation regulations (50 CFR 402), this transmits our (Fish and Wildlife Service) revised final biological opinion for impacts to federally listed endangered species for the proposed Southern Corridor Highway Project from the vicinity of MP 2 on Interstate Highway 15 to Highway 9 near the Virgin River within the Cities of St. George, Washington and Hurricane, Washington County, Utah. This opinion is provided to you as the lead Federal Agency regarding Section 7 consultation on the project covered under this consultation. Copies of this biological opinion should be provided to the Utah Department of Transportation (UDOT) because we have incorporated conservation recommendations that the Federal Highway Administration (FHWA) should include as conditions of any permits, authorizations and/or funding issued for this project.

Reference is made to Vince Izzo's, of HDR Engineering, letter of February 18, 2002 with its attached biological assessment prepared by Intermountain Ecosystems, LLC. This letter on behalf of Utah Department of Transportation requests initiation of formal interagency section 7 consultation for the above project. We concur with their determination that the Southern Corridor Highway Project is likely to adversely affect federally listed endangered plant species *Astragalus holmgreniorum* (Holmgren milk-vetch), *Arctomecon humilis* (dwarf bear-poppy) and *Pediocactus sileri* (Siler pincushion cactus). In addition we concur with the biological assessment's determination of no effect for the Desert tortoise (*Gopherus agassizii*), Mexican spotted owl (*Strix occidentalis lucida*), Southwestern willow flycatcher (*Empidonax traillii eximius*) and Shivruts milk-vetch (*Astragalus ampullarioides*). The Service concurs, with electronic correspondence received on September 19, 2002, from Vince Izzo on behalf of UDOT, that a may affect, not likely to adverse affect condition exists for the bald eagle (*Haliaeetus leucocephalus*), Virgin River chub (*Gila seminuda*), and woundfin (*Plagopterus argentissimus*) as a consequence of the proposed action. We have used Intermountain Ecosystems' biological assessment and HDR Engineering's May 2002 Working Draft of the "Southern Corridor Draft

Environmental Impact Statement & Section 4(f)/6(f) Evaluation" on the project in preparing this biological opinion because they described the proposed action and its potential impact on the affected species. We revised our biological opinion of September 20, 2002 based on comments received in a September 24, 2002 letter from Robert Dowell of the Utah Department of Transportation.

#### BIOLOGICAL OPINION

Based upon the best scientific and commercial information that is currently available, it is our biological opinion that the proposed project as described below, is not likely to jeopardize the continued existence of the plant species *Astragalus holmgreniorum*, *Arctomecon humilis*, and *Pediocactus sileri* providing that active conservation measures are taken as outlined in the biological assessment and this biological opinion. In addition, we provide additional conservation recommendations for the species which we request be included as project development stipulations in your funding and other project authorizations. Conservation measures identified in the biological assessment and this biological opinion will minimize any adverse affects of the proposed highways construction on bald eagle, virgin River chub, and woundfin. The project will not affect the Desert tortoise, Mexican spotted owl, Southwestern willow flycatcher and *Astragalus ampullarioides*.

#### PROJECT DESCRIPTION

The proposed Southern Corridor is a highway needed to provide a regional transportation conveyance facility between St. George, Washington City, and Hurricane that would complement local land use plans. It would also accommodate areas of future growth, reduce some traffic on the existing and future network of arterial and city streets, and improve conditions in areas already developed.

The proposed Southern Corridor would be a four-lane, limited-access highway beginning at Interstate 15 (I-15) approximately three miles north of the Arizona border near the southwest end of St. George, and connecting with State Route (SR)-9 near Hurricane. Depending on the alternative selected, the highway would be between 20 and 26 miles in length. A multiple-use trail for pedestrians, bicyclists, and equestrians would parallel the highway. The right-of-way requirements for the highway will range from 150 feet to 300 feet.

The Southern Corridor's western terminus will start with an interchange at I-15 near reference post 2, just north of the Atkinville Wash. From this western terminus, the Southern Corridor will continue in a southeasterly direction north of Atkinville Wash to River Road immediately north of the Arizona border. The highway will then continue easterly south of White Dome and north of the Arizona state line to the vicinity of the Fort Pearce Wash. The highway then continues northeasterly to a point near the Punch Bowl on the west flank of the Warner Ridge. From this point the highway continues northerly along the western base of the Warner Ridge and crosses the ridge south of the Virgin River. The highway in this area is approximately 700 feet from the



Virgin River. The Southern Corridor then is headed in a northerly direction to its eastern terminus on SR-9 in the vicinity of Hurricane. The eastern terminus has not been selected, three alternatives are under consideration for the intersection with SR-9. All alternatives are east of the Virgin River.

The following conservation measures outlined in the biological assessment and Draft EIS will directly benefit populations and habitat of Federally listed endangered species affected by the proposed project:

1. Purchase and protection of in-kind habitat adjacent to the proposed Southern Corridor highway to compensate for areas impacted by construction activities. This action will involve a one for one replacement of acreage affected. The Federal Highway Administration and Utah Department of Transportation will acquire *Arctomecon humilis*, *Astragalus holmgreniorum*, and *Pediocactus sileri* habitat along the highway right of way north of the proposed highway. This habitat should consist of at least two habitat parcels. One habitat parcel will be for *Astragalus holmgreniorum* and will be from the species population north of Atkinville Wash between I-15 and River Road. The Fish and Wildlife Service will identify the specific parcel after it conducts a through survey of potential habitat during a favorable growing year for this species. Another parcel will be for *Arctomecon humilis* and *Pediocactus sileri* and will be from the species White Dome population immediately north of the Arizona State Line and east of River Road. The Fish and Wildlife Service will identify the specific parcel after it conducts a through survey of potential habitat during a favorable growing year for these species. Because habitat areas may change prior to construction of the Southern Corridor highway, the general project area will be surveyed within one year prior to construction to determine the actual extent of habitat impacted in order to develop the precise acreage of habitat acquisition required for the species conservation. All occupied endangered and threatened plant habitat within the ROW will be considered to be impacted and in need of replacement. For the purposes of this biological opinion, the occupied habitat area of these plant species will be defined as an area with a radius of 50 meters centered on each plant or plant cluster.
2. The proposed Southern Corridor highway right of way will be approximately 300 feet wide between its western terminus at I-15 and the north-south section line between sections 33 and 34 Township 43 South Range 15 West to accommodate for cut and fill, utilities, and/or a pedestrian/equestrian trail. Upon construction of the roadway, ROW fences will be installed which will provide a barrier to unauthorized access (i.e. motorcycles and all terrain vehicles). Within the right of way UDOT will keep the construction disturbance area to a minimum. In selected areas, where the full 300 foot ROW is not needed for actual road way construction, the construction of the highway within the ROW will be modified to minimize impacts to the listed plants species and key elements of their habitat such as pollinator nest locations. This will be accomplished by shifting the road alignment from one side of ROW to the other (generally to the south). This action will preserve the maximum amount of undisturbed habitat for the three listed plant species and their

pollinators. This conservation measure may be modified as a consequence of on going discussions with Utah State Institutional Lands Trust Administration on the status of management and uses, to include preserves for rare plants, of its land in the vicinity of Atkinville Wash, Price Hills and White Dome.

3. The Utah Department of Transportation will revegetate the disturbed construction areas through the zone described above along the Southern Corridor Highway with native species adapted to the existing soils derived from the Virgin Limestone, Shinob Kibe and Red members of the Moenkopi geological formation.
4. The Utah Department of Transportation will implement an aggressive weed abatement program that preserves the desirable native flora. Weed management of disturbed areas especially for red brome (*Bromus rubens*), cheat grass (*Bromus tectorum*), African mustard (*Malcolmia africana*) and storks bill (*Erodium cicutarium*) is critical. The Utah Department of Transportation will conduct ongoing coordination with the US Fish and Wildlife Service for its vegetation management within the Southern Corridor highway right of way.
5. The construction of the proposed Southern Corridor Highway with its right of way fences will provide protection for the northern portion of the Warner ridge population of *Arctomecon humilis* providing that all outcrops of the Shinob kibe member of the Moenkopi geological formation are east of the road. The roadway with its ROW fences will provide a barrier to trespass ORV use in that area. Similar protections may accrue to *A. humilis*, *Pediocactus sileri* and *Astragalus holmgreniorum* habitat in the White Dome and Atkinville Wash areas as possible plant preserves are established in the future.
6. Impacts to the Virgin River or any other habitat of the Woundfin and Virgin River Chub are not anticipated. However, the proposed highway will skirt the floodplain of the Virgin River at the north end of Warner Ridge. The Utah Department of Transportation will implement Best Management Practices to ensure conservation of the Virgin River chub and the woundfin species and their habitat. Best Management Practices will provide for effective erosion and sediment control in areas adjacent to the Virgin River or in drainages that connect to the Virgin River and will include an effective revegetation of construction disturbance.
7. A bald eagle roost site exists within project area along SR-9 and the Hurricane sewer lagoons. The roost site will be monitored between November 1 and March 31 during the construction of the proposed highway. If bald eagles appear disturbed, construction will cease within 0.5 mile of the roost and the monitor will consult with the Salt Lake City FWS field office. The Utah Department of Transportation then must obtain the Service's clearance before resuming construction within 0.5 mile of the roost.

8. The southwestern willow flycatcher is currently not known to occupy habitat near any feature of the proposed southern Corridor Highway. However, the possibility exists prior to or during the highways construction, that the species may occupy potential habitat near the proposed highway adjacent to the Virgin River in a limited area at the north end of Warner Ridge. The Utah Department of Transportation will resurvey potential southwestern willow flycatcher habitat within a year prior to construction. If southwestern willow flycatchers are found FHWA and UDOT will reinstate consultation with the Service.
9. Future access road projects connecting to the Southern Corridor highway will need to address impacts to Federally listed endangered and threatened species. These future road projects should be sited to minimize impacts to listed species. Future projects that may tier of the Southern Corridor project may be subject to interagency Section 7 consultation as appropriate.

#### BASIS FOR BIOLOGICAL OPINION

The proposed project is expected to directly take individual *Astragalus holmgreniorum*, *Arctomecon humilis* and possibly *Pediocactus sileri* plants. In addition the highway transects occupied habitat of these three species. The Utah Department of Transportation in consultation with the Fish and Wildlife Service has designed the project to minimize impact to these species by aligning the proposed highway right of way to avoid to the maximum extent possible occupied habitat of these species. The Federal Highway Administration through UDOT will mitigate potential secondary impacts to avoid additional losses these species populations and their habitat by implementing conservation measures described in the project's biological assessment and the conservation measures contained in this biological opinion. Impacts to other listed threatened and endangered species in the vicinity of the Southern Corridor project will be avoid by the implementation of Best Management Practices outlined in this biological opinion, your biological assessment and Draft Environmental Impact Statement.


#### CONCLUSION

This concludes our biological opinion on the impacts of the proposed project and replaces our biological opinion of September 20, 2002. This opinion was based upon the information described herein. If new information becomes available, new species listed, or any other change which alters the operation of the projects from that which is described in your correspondence and which may affect any endangered or threatened species in a manner or to an extent not considered in this biological opinion (see 50 CFR 402.16), formal section 7 consultation should be reinitiated.

Thank you for your cooperation in the formulation of this biological opinion and your interest in conserving endangered species. Should you have any questions or need any further assistance please contact Larry England, Botanist of my staff at (801)524-5001 ext. 138.

Sincerely,

**LARRY W. CRIST**

 Henry R. Maddux  
Field Supervisor

cc: Robert Dowell, Southern Corridor Project Engineer, Utah Department of Transportation,  
Richfield District, 1345 South 350 West, Richfield, Utah 84701  
Vince Izzo, Environmental Section Manager, HDR Engineering, Inc., 3995 South 700  
East, Ste. 100, Salt Lake City, Utah 84107

bcc: ES/Mail Stop 60102  
Project file  
Reading file

ENGLAND/tsb:9/20/02  
file: Formal Files/FWS/6-UT-02-F-008  
C:\Black\FHWA\2002\England\Udot-034.wpd





UGS  
JAN 31 2003

Michael O. Leavitt  
Governor

**State of Utah  
Department of Transportation**

John R. Njord, P.E.  
Executive Director

January 27, 2003

Dr. James Kirkland, State Paleontologist  
Utah Geological Survey  
P.O. Box 146100  
Salt Lake City, Utah 84114-6100

RE: SP-LC53(1); Southern Corridor, Washington County  
U.C.A. 63-73-19



Dear Dr. Kirkland:

UDOT is evaluating construction of an alternate route from Interstate 15 (I-15), around the southern and eastern portion of the St. George urbanized area to State Route 9 (SR-9), in Washington County. We are currently in the process of studying alternatives to address the level of service and other problems with Interstate 15 between the Hurricane Interchange and south of St. George in the vicinity of Atkinville Wash, and current and projected growth in the area to the east of St. George. The study is state funded, however, the Utah Division of the Federal Highway Administration is the lead agency for the National Environmental Policy Act. Local governments and possibly UDOT anticipate applying for federal funds to complete the design and construction of the selected alternative. A Draft Environmental Impact Statement (DEIS) as defined by NEPA is currently being prepared. Please Bureau of Land Management and Utah State and Institutional Trust Lands have jurisdiction within the project area of potential effects. Please review the following information, and if you concur, sign on the line provided at the end of this letter.

Initial screening of potential regional alignment options that would meet the purpose and need limited the focus to the area southeast of I-15 where current and projected growth is occurring, north toward Hurricane. The logical termini originates at I-15 just north of Atkinville Wash, based on the importance of I-15 as a regional transportation facility. SR-9 is the main connection between I-15 and the town of Hurricane, Zion National Park, and access to SR-89 between Hurricane to Hildale; the northern terminus is therefore SR-9. Alternative alignments have been refined over the last two years through the study of local topography and environmental resources such as farmlands, wetlands, flood plains, threatened and endangered species, including habitat, and cultural and fossil resources. The assumption is the new route would be a limited-access roadway within a 300 ft wide right of way. The width was minimized in response to the requests of several agencies and property owners.

The primary alternative locations for the new highway are illustrated on the enclosed maps. The width of the study areas are between 122 m to 914 m (400 -3,000 ft). Some alternatives were inventoried, but have subsequently been dropped from the analysis. The consultant's report includes all of the areas inventoried. Given the environmental and socio-economic constraints, a single major location is common to the three primary alternatives for the southern two thirds of the project length. The alternatives split in how to connect with SR-9, designated the 3400 West Alternative (Alignments Modified A and A); 2800 West Alternative (Alignments Modified A and D); and the 4300 West Alternative (Modified A and E). No

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Region Four

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Southern Corridor  
January 27, 2003  
Page 2

preferred alternative has been identified. Construction of the Southern Corridor will be phased, first as a signalized roadway, and as traffic increases, to a limited access highway with interchanges. Proposed interchanges will require a 122 m (400 ft) right of way, and would also be constructed as needed over time. Sixteen locations for possible interchanges are identified at major existing intersections and new accesses to development properties.

Enclosed is a copy of Alden Hamblin's fossil inventory and a small addendum to pick up some private parcels, along with the requisite locality forms. The paleontologist inspected only those areas with fossiliferous formations. Thirteen fossil localities are identified, of which 42WS192P, 42WS193PT, 42WS194P, 42WS197P, 42WS198T, 42WS206T, 42WS204T, and 42WS205T are on BLM lands; 42WS203I and 42WS191I are on SITLA, and 42WS192P, 42WS195T, 42WS196, and 42WS209v are on private lands. The attached table presents the significance rating for each locality.

Of the above sites, only 42WS193PT, 42WS195T, 42WS205T, 42WS206T and 42WS209V are physically impacted by proposed alternatives. The consultant has recommended monitoring at all of these localities. At site 42WS206T, the consultant recommends collection of visible tracks and exploratory excavation in advance of construction. UDOT concurs with the mitigation recommendations, and commits to erecting protective temporary fencing during construction to prevent accidental encroachment onto these localities. All paleontological mitigation work will be overseen by a permitted paleontologist. Any collected fossil material will be curated at the Utah Museum of Natural History at the University of Utah.

Thank you for your efforts. Should you require additional information or assistance, please contact me at (435) 893-4753 or [susanmiller@utah.gov](mailto:susanmiller@utah.gov).


Respectfully,

  
Susan G. Miller, NEPA/NHPA Specialist  
Region Four Environmental

sgm/enclosures

cc: (w/ partial enclosures)	Greg Punske, FHWA	
(w/out enclosures)	D. Friant, Environmental Engineer	R. Dowell, Project Manager
	Gardiner Dalley, BLM	Geralyn Mcewan, BLM
	Kenny Wintch, SITLA	Vince Izzo, HDR

I concur with the above findings and recommendation for excavation and monitoring, and that the FHWA/UDOT have taken into account effects on paleontological resources.

  
Dr. James Kirkland, UGS State Paleontologist

1/31/03  
Date

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